

State Injury Indicators



Traumatic Brain Injury Indicators (TBI) Hospitalizations

Category:	Traumatic Brain Injury Indicators (TBI)
Demographic Group:	All residents.
Numerator:	Hospitalizations with any of the following ICD-9-CM diagnostic codes: 800.00-801.99 (Fracture of the vault or base of the skull), 803.00-804.99 (Other and unqualified or multiple fractures of the skull), 850.0-850.9 (Concussion), 851.00-854.19 (Intracranial injury, including contusion, laceration, and hemorrhage), 950.1-950.3 (Injury to the optic chiasm, optic pathways, or visual cortex), 959.01 (Head injury, unspecified), 995.55 (Shaken infant syndrome)
Denominator:	Midyear population for the calendar year under surveillance.
Measures of Frequency:	Annual number of persons hospitalized. Annual incidence—crude and age-adjusted (standardized by the direct method to the year 2000 standard U.S. population).
Period for Case Definition:	Calendar year.
Background:	An estimated 5.3 million Americans live with a TBI-related disability. According to one study, about 40% of those hospitalized with a TBI had at least one unmet need for services one year after their injury.*,**
Limitations of Indicator:	Injuries that result in a hospital admission represent only a portion of the overall burden of injury. Evaluations of these injuries should be considered in the context of both less- and more-severe injuries.
Data Resources:	State hospital discharge data (numerator) and population estimates from the U.S. Census Bureau or suitable alternative (denominator).
Limitations of Data Resources:	The accuracy of indicators based on codes found in hospital discharge data is limited by the completeness and quality of coding. The overall completeness of e-coding is of particular concern and should be reviewed in conjunction with the indicator.
Healthy People 2010 Objectives:	15-1: Reduce hospitalization for nonfatal head injuries
CDC's Health Protection Goals:	Healthy People in Every Stage of Life: Crosscutting Healthy People in Healthy Places: Crosscutting

*Thurman D, Alverson C, Dunn K, Guerrero J, Snizek J. Traumatic brain injury in the United States: a public health perspective. J Head Trauma Rehabil 1999;14(6):602-15. **Corrigan JD, Whiteneck G, Mellick D. Perceived needs following traumatic brain injury. J Head Trauma Rehabil 2004;19(3):205-16.